

## **CLAIMS**

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## What is claimed is:

1	An apparatus	aamn	ricir	~~
1. \	An apparatus	comp	HSII	ıy.

a wireless transceiver to transmit and receive signals in accordance with a first protocol to and from first other apparatuses of a first wireless network;

a wireless receiver to receive signals transmitted in accordance with a second protocol by second other apparatuses of a second wireless network; and

a controller manager coupled to the wireless transceiver and receiver to control operation of the wireless transceiver based at least in part on one signaling characteristic of said received signals from said second other apparatuses of the second wireless network, to reduce interference with said second other apparatuses of the second wireless network.

- 2. The apparatus of claim 1, wherein said second protocol is a frequency hopping protocol comprising a plurality of frequencies employed in accordance with a pseudo random pattern, and the controller manager includes logic to ascertain the pseudo random frequency hopping pattern using said received signals from said second other apparatuses.
- 1 3. The apparatus of claim 2, wherein the controller manager further includes
- 2 logic to predict when interference with said second other apparatuses of said
- 3 second wireless network will occur, based on said ascertained pseudo random
- 4 frequency hopping pattern.

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- 1 4. \ The apparatus of claim 1, wherein said second protocol is a constant
- 2 frequency protocol, and the controller manager includes logic to ascertain the
- 3 constant frequency using said received signals from said second other apparatuses.
- The apparatus of claim 4, wherein the controller manager further includes
  logic to predict when interference with said second other apparatuses of said
  second wireless network will occur, based on said ascertained constant frequency.
- 1 6. The apparatus of claim 1, wherein the controller manager further includes
- 2 logic to suspend operation of said wireless transceiver to avoid interference with
- 3 said second other apparatuses of said second wireless network, whenever an
- 4 interference is predicted to occur.
- 1 7. The apparatus of claim 1, wherein the controller manager further includes
- 2 logic to determine filtering to be employed, whenever an interference is predicted to
- 3 occur, to cancel interfering signals from said second other apparatuses.
- 1 8. The apparatus of claim 7, wherein the controller manager includes logic to
- 2 determine a notch filter, inversely formed in accordance with transmit signals of said
- 3 second other apparatuses.
- 1 9. The apparatus of claim 7, wherein the controller manager includes logic to
- 2 employ said filtering to cancel interfering signals of said second other apparatuses
- 3 of said second wireless network, whenever an interference is predicted to occur.

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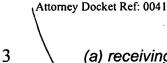


- 1Q. 1 The apparatus of claim 1, wherein the controller manager further includes
- 2 logià to preemptively notify one or more of said first other apparatuses, an
- 3 interference is predicted to occur.
- 1 11. The apparatus of claim 10, wherein the controller manager further includes
- 2 logic to preemptively notify said one or more of said first other apparatuses, a
- 3 selected one of suspending operation to avoid interference with said second other apparatuses and applying filtering to cancel interfering signals from said second

other apparatuses.

- 1 12. The apparatus of claim 1, wherein the controller manager further includes
- 2 logic to request one of said first other apparatuses to preemptively provide
- 3 notification of a predicted occurrence of an interference with said second other
- 4 apparatuses.
- 13. 1 The apparatus of claim 1, wherein the first protocol is a protocol selected
- 2 from a group consisting of 802.11, 802.11a, 802.11b, and Home RF, and the
- 3 second protocol is the Bluetooth protocol.
- 1 14. The apparatus of claim 1, wherein the first protocol is the Bluetooth protocol,
- 2 and the second protocol is a protocol selected from a group consisting of 802.11,
- 3 802.11a, 802.11b, and Home RF.
- 1 *15.* In a wireles's apparatus having a wireless transceiver and a wireless receiver;
- 2 a method of operation comprising:

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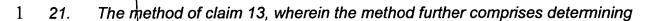
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- (a) receiving signals transmitted in accordance with a first protocol by first other apparatuses of a first wireless network;
- (b) determining at least one signaling characteristic of said received signals from said first other apparatuses; and
- (c) operating said wireless transceiver to transmit and receive signals in accordance with a second protocol to and from second other apparatuses of a second wireless network, based on said at least one determined signaling characteristic of said received signals from said first other apparatuses, to reduce interference with proximately located ones of said first other apparatuses of the first wireless network.
- The method of claim 15, wherein said first protocol is a frequency hopping *16.* protocol comprising a plurality of frequencies employed in accordance with a pseudo random pattern, and the method further comprises ascertaining the pseudo random frequency hopping pattern using said received signals from said first other apparatuses.
- 1 The method of claim 16, wherein the method further comprises predicting 17. 2 when interference with said first other apparatuses of said first wireless network will 3 occur, based on said ascertained pseudo random frequency hopping pattern.
- 1 18. The method of claim 15, wherein said first protocol is a constant frequency 2 protocol, and the method further comprises ascertaining the constant frequency 3 using said received signals from said first other apparatuses.



- 1  $1\dot{9}$  The method of claim 18, wherein the method further comprises predicting
- 2 when interference with said first other apparatuses of said first wireless network will
- 3 occur, based on said ascertained constant frequency.
- 1 20. The method of claim 15, wherein the method further comprises suspending
- 2 operation of said wireless transceiver to avoid interference with said first other
  - apparatuses of said first wireless network, whenever an interference is predicted to
  - occur.



- 2 filtering to be employed, whenever an interference is predicted to occur, to cancel
- 3 interfering signals from said first other apparatuses.
- 1 22. The method of claim 21, wherein the method further comprises determining a
- 2 notch filter, inversely formed in accordance with transmit signals of said first other
- 3 apparatuses.
- 1 23. The method of claim 21, wherein the method further comprises employing
- 2 said filtering to cancel interfering signals of said first other apparatuses of said first
- 3 wireless network, whenever an interference is predicted to occur.
- 1 24. The method of claim 15, wherein the method further comprises preemptively
- 2 notifying one or more of said second other apparatuses, an interference is predicted
- 3 to occur.

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- 1 **`**25. The method of claim 24, wherein the method further comprises preemptively 2 nòtifying said one or more of said second other apparatuses, a selected one of 3 suspending operation to avoid interference with said first other apparatuses and 4 applying filtering to cancel interfering signals from said first other apparatuses.
  - 26. The method of claim 15, wherein the method further comprises requesting one of said second other apparatuses to preemptively provide notification of a predicted occurrence of an interference with said first other apparatuses.
  - 27. A collection of apparatuses comprising:

a first plurality of apparatuses equipped to communicate wirelessly in accordance\with a first protocol; and

a second plurality of apparatuses equipped to communicate wirelessly in accordance with a second protocol, wherein at least one of the second plurality of apparatuses is further equipped to receive signals transmitted in said first protocol, and determine\at least one signaling characteristics of said received signals transmitted in accordance with said first protocol, and to reduce interference with proximately located one or ones of said first plurality of apparatuses based on said determined at least one signaling characteristics of said received signals transmitted in accordance with said first protocol.

- 1 The collection of apparatuses of claim 27, wherein the at least one of the 28.
- 2 second plurality of apparatuses includes logic to predict an interference with said
- 3 first plurality of apparatuses is to occur.

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The collection of apparatuses of claim 27, wherein the at least one of the second plurality of apparatuses includes logic to suspend transmit operation to avoid interference with said first plurality of apparatuses, whenever an interference with said first plurality of apparatuses is predicted to occur.

*30.* The collection of apparatuses of claim 27, wherein the at least one of the second plurality of apparatuses includes logic to applying filtering to cancel interfering signals of said first plurality of apparatuses, whenever an interference with said first plurality of apparatuses is predicted to occur.